

Why We Are Here

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Monitoring & Maintenance

- Physical controls
 - Signs are inspected quarterly
- Institutional Controls
 - Annual inspection of COU to ensure IC effectiveness and verify that Environmental Covenant remains on file
- Surface Water and Groundwater
 - RFLMA Table 2
- Landfills
 - RFLMA Table 3

Monitoring & Maintenance, continued

- Residual subsurface contamination
 - Monitor for significant erosion annually
 - Monitor for significant erosion after major precipitation events
- Groundwater Treatment Systems
 - Untreated influent and treated effluent
 - Impacts to surface water downstream of effluent discharge point in accordance with Table 2 and flowchart decision rules
- Ecological sampling required by RFLMA is complete

Monitoring & Maintenance, continued

■ Operational

- Boundary wells
- Pre-discharge pond sampling
- Adverse biological conditions

■ Other

- Threatened and endangered species
- Revegetation
- Best management practices
- Wetland mitigation



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RFLMA Table 2 Example

Table 2. Water Monitoring Locations and Sampling Criteria

General Objective	Classification	Media	Location ID (1)	Location Description	Frequency	Analytes (4)
Points of Compliance (POCs)						
	POC (5)	SW	GS01	Woman Creek at Indiana Street	Flow-paced (varies)	Pu, Am, isotopic U**, flow rate
	POC (5)	SW	GS03	Walnut Creek at Indiana Street	Flow-paced (varies)	Pu, Am, isotopic U**, nitrate (pond discharges only), flow rate
	POC (5)	SW	GS08	Pond B-5 outlet	Flow-paced (varies)	Pu, Am, isotopic U**, nitrate, flow rate
	POC (5)	SW	GS11	Pond A-4 outlet	Flow-paced (varies)	Pu, Am, isotopic U**, nitrate, flow rate
	POC (5)	SW	GS31	Pond C-2 outlet	Flow-paced (varies)	Pu, Am, isotopic U**, flow rate
Points of Evaluation (POEs)						
	POE (6)	SW	GS10	S. Walnut Creek at B-Series Bypass	Flow-paced (varies)	Pu, Am, isotopic U**, dissolved Ag and Cd, total Be and Cr, flow rate
	POE (6)	SW	SW027	SID at Pond C-2	Flow-paced (varies)	Pu, Am, isotopic U**, dissolved Ag and Cd, total Be and Cr, flow rate
	POE (6)	SW	SW093	N. Walnut Creek at end of FC-3	Flow-paced (varies)	Pu, Am, isotopic U**, dissolved Ag and Cd, total Be and Cr, flow rate
Boundary Wells						
	Boundary (7)	GW	10394	Woman Creek at Indiana Street	Annual	VOCs, U, nitrate
	Boundary (7)	GW	41691	Walnut Creek at Indiana Street	Annual	VOCs, U, nitrate
Present Landfill (PLF) Area (2)						
	RCRA (10)	GW	70193	Upgradient	Quarterly	VOCs, metals
	RCRA (10)	GW	70393	Upgradient	Quarterly	VOCs, metals
	RCRA (10)	GW	70693	Upgradient	Quarterly	VOCs, metals
	RCRA (10)	GW	73005	Downgradient	Quarterly	VOCs, metals
	RCRA (10)	GW	73105	Downgradient	Quarterly	VOCs, metals
	RCRA (10)	GW	73205	Downgradient	Quarterly	VOCs, metals
	AOC (7)	GW	4087	Below East Landfill Pond	Semiannual	VOCs, U, nitrate
	AOC (7)	GW	8206989	Below East Landfill Pond	Semiannual	VOCs, U, nitrate
	Treatment System (11)	GW	PLFSEEPINF	Seep influent to treatment system	Quarterly	VOCs, isotopic U**, metals, instantaneous flow rate
	Treatment System (11)	GW	GWISINFNORTH	North GWIS influent to treatment system	Discontinued	VOCs, isotopic U**, metals, nitrate
	Treatment System (11)	GW	GWISINF SOUTH	South GWIS influent to treatment system	Discontinued	VOCs, isotopic U**, metals, nitrate
	Treatment System (11)	SW	PLFSYSEFF	Treatment system effluent	Quarterly; Monthly (if required by decision)	VOCs, SVOCs, isotopic U**, metals
	Treatment System (11)	SW	PLFPONDEFF	East Landfill Pond at outlet	As required by decision rule	As required by decision rule
Original Landfill (OLF) Area (3)						
	RCRA (10)	GW	P416589	Upgradient	Quarterly	VOCs, metals, SVOCs
	RCRA (10)	GW	80005	Downgradient	Quarterly	VOCs, metals, SVOCs
	RCRA (10)	GW	80105	Downgradient	Quarterly	VOCs, metals, SVOCs
	RCRA (10)	GW	80205	Downgradient	Quarterly	VOCs, metals, SVOCs
	AOC (7)	GW	11104	Downgradient, downstream	Semiannual	VOCs, U
	OLF SW (12)	SW	GS05	Woman Creek at west property line (upstream)	Quarterly; Monthly (if required by decision)	VOCs, isotopic U**, metals
	OLF SW (12)	SW	GS59	Woman Creek 700 feet east of OLF (downstream)	Quarterly; Monthly (if required by decision)	VOCs, isotopic U**, metals
Mound Site Plume and Treatment System (MSPTS)						
	Evaluation (9)	GW	00897	Source area	Biennial	VOCs
	Sentinel (8)	GW	15699	Downgradient of intercept trench	Semiannual	VOCs
	Treatment System (11)	GW	MOUND R1-0	Treatment system influent	Semiannual	VOCs
	Treatment System (11)	GW	MOUND R2-E	Treatment system effluent	Semiannual	VOCs
	Treatment System (11)	SW	GS10	S. Walnut Creek at B-Series Bypass	Semiannual	VOCs

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RFLMA Table 3 Example

Table 3. Present and Original Landfill Inspection and Maintenance Requirements

Present Landfill				
Requirement	Description of activity	Frequency	Documentation/Reporting	Exit strategy
Final cover inspection and monitoring	<ul style="list-style-type: none"> inspect/monitor slope stability, soil cover visually inspect surface of landfill cover for cracks, depressions, heaving, and sinkholes monitor settlement monuments and side slope stability monuments vegetation monitoring 	<ul style="list-style-type: none"> quarterly (settlement and stability monuments annually); evaluate frequency during CERCLA periodic review additional weather-related inspections within 2 days after storm event of one inch or more of rain in a 24-hour period or significant melt of 10-inch or more snowstorm Monthly for noxious weeds during growing season (April-Sept.). Annually for vegetation 	<ul style="list-style-type: none"> conditions affecting effectiveness of landfill cover to be reported per note 1 below document on inspection checklist; submit to parties within one month of inspection; include in quarterly and annual reports 	<ul style="list-style-type: none"> Consultative process or periodic CERCLA review Vegetation monitoring performed until PLF M&M Plan grassland success criteria are met
Inspection and monitoring of stormwater management system and erosion control features	<ul style="list-style-type: none"> Visually inspect stormwater management structures (channels/lining, culverts, and outfalls); erosion control features (perimeter channels and natural drainages); and seep treatment system 	<ul style="list-style-type: none"> monthly for first year; evaluate frequency during CERCLA periodic review additional weather-related inspections within 2 days after storm event of one inch or more of rain in a 24-hour period or significant melt of 10-inch or more snowstorm 	<ul style="list-style-type: none"> conditions affecting effectiveness of landfill cover to be reported per note 1 below document on inspection checklist; submit to parties within one month of inspection; include in quarterly and annual reports 	<ul style="list-style-type: none"> Consultative process or periodic CERCLA review
GW monitoring	Included in Table 2, Figure 1, and Figure 10	Included in Table 2, Figure 1, and Figure 10	Included in Table 2, Figure 1, and Figure 10	Included in Table 2, Figure 1, and Figure 10
Landfill seep and pond monitoring	Included in Table 2, Figure 1, and Figure 11	Included in Table 2, Figure 1, and Figure 11	Included in Table 2, Figure 1, and Figure 11	Included in Table 2, Figure 1, and Figure 11
Maintenance and repairs	<ul style="list-style-type: none"> Perform minor or major repairs as needed; for major damage or repairs, consult with parties and develop appropriate actions for approval by CDPHE 	<ul style="list-style-type: none"> as needed 	<ul style="list-style-type: none"> minor/routine repairs and maintenance report on inspection form conditions affecting effectiveness of landfill cover to be reported per note 1 below 	<ul style="list-style-type: none"> Consultative process or periodic CERCLA review
Institutional and physical controls	<ul style="list-style-type: none"> Fence around perimeter of Central OU, signs at entry points to Central OU, warning signs in accordance with 6 CCR 1007-3 Part 265.14 		<ul style="list-style-type: none"> failure of physical controls to be reported per note 1 below failure of institutional controls to be per note 2 below 	<ul style="list-style-type: none"> Consultative process or periodic CERCLA review

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